

## Revised Mercury Rules

### June 2003

#### Critical Considerations

- *Planning and Design Period* – The proposed rules do not require mercury emission reductions until seven years after promulgation (2010). This provides time for refinement of mercury control technologies, planning and design for controls, and initiating the installation of equipment.
- *Staged Installation Schedule* – There are 42 coal-fired boilers at the four utilities affected by the proposal. The schedule we are proposing does not require all these units to be controlled at the same time. We recognize that equipment installation must be staged to avoid disruption in service. Thus the proposal has an initial reduction at year seven (2010) and a final reduction at year twelve (2015).
- *Compliance Flexibility* – Each of the four major utilities is allowed to average their mercury emission reduction requirement across their entire system allowing flexibility in the deciding how the mercury reductions will be achieved. In addition, the four major utilities can enter into agreements with each other to exchange excess mercury reductions to meet the rule requirements.
- *Multi-pollutant Approach* – The proposal allows relief from the initial reduction requirement if a major utility is interested in pursuing a multi-pollutant approach.
- *Fuel Mix* – The proposal does not force utilities to switch to natural gas to meet mercury reduction requirements. The reductions proposed can be met by installation of controls on existing coal-fired units. Fuel switching is an option not a mandated action.
- *Electric Reliability Waiver* – It is recognized that unanticipated events beyond the control of a utility may result in mercury emissions above the proposed limitations. The proposal includes a provision that would allow a waiver under these circumstances. The Public Service Commission would be consulted as part of any waiver request.
- *Variance* – In addition to the waiver there is provision for a variance that could specify a different schedule or reduction level or both based on a showing of technological or economic infeasibility. The Public Service Commission would also be consulted as part of the variance review.
- *Periodic Evaluation of Requirements* – At two specific times a report to the Natural Resources Board is required that would allow for revision to mercury reduction requirements based on control technology development and other factors.

#### Summary Table

PROPOSED RULES	REVISED RULES
<b>Utilities Affected</b> – Affects all major utilities in the state (mercury emissions greater than 100 pounds per year) – Dairyland Power Cooperative, WE Energies, Wisconsin Public Service Cooperation and Alliant Energy.	No change
<b>Determining Baseline Emissions</b> – Baseline emissions must be determined by a procedure that includes evaluation of historical fuel mercury content and use information from the years 1998 through 2000. This requirement affects major utilities (>100 pounds per year) and other significant sources (>10 pounds per year). Stack emissions of mercury are the foundation for establishing the baseline.	Only major utilities are required to set baseline emissions. Mercury content in fuel and fuel consumption are the foundation for establishing the baseline. <i>Supports methodology favored by major utilities. The need for historical data is minimized and this method avoids the issues of determining current equipment performance and lack of credit for recent changes at a facility. This method puts all major utilities on a uniform footing with good quality control on mercury testing. Facilities keep good records of coal consumption so using current and historical basis is fair. No penalty for already having made improvements</i>

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	<i>since the baseline is from uncontrolled emissions.</i>
<b>Emissions Cap</b> – Beginning in the 4 <sup>th</sup> year after promulgation a cap is placed on mercury emissions from each major utility and other significant commercial and industrial sources.	Cap becomes effective in 2008 for major utilities. Industry mercury emissions would not be subject to emission caps. A voluntary program to reduce mercury emissions will be developed. Progress on this voluntary program would be provided to the NRB.
<b>Major Utility Reduction Requirement</b> – Three reductions required over a fifteen-year period – 30% five years, 50% in ten years and 90% in Fifteen years.	The fifteen-year 30/50/90 percent reduction requirement for major utilities is replaced with a two-step reduction requirement that results in 80% reduction of uncontrolled mercury emissions in 12 years (2015). An initial reduction of 40% is required at seven years (2010).
<b>Electric Reliability</b> – Variance process provided in the proposed rules	Specific electric reliability waiver that may provide short-term relief if certain circumstances are met is added. PSC would be consulted. A variance for economic or technological hardships would be retained.
<b>Emission Offsets</b> – New utility sources that have mercury emissions greater than 10 pounds per year are required to obtain offsets at a ratio of 1.5 to 1.0.	The requirement for offsets for new mercury emission sources is eliminated. Significant new sources would be required to limit mercury emissions through application of control technology if not covered by a federal requirement under section 112 of the Clean Air Act.
<b>Trading</b> – Emission reduction credits can be used by major utilities to meet reduction requirements in the rules. These are credits that are created by pollution reduction projects initiated by industrial and commercial sources or by mercury containing product collection program.	Trading provisions are largely eliminated. <i>Additional analyses have determined that you cannot accurately measure the amount of credit from a product collection program or reduction at a source of process emissions. Additionally, the amount of credit that was initially felt to be available from industrial combustion sources is much less than anticipated. One source, Vulcan Chemical, may be in a position to set the market price.</i>
<b>Compliance Flexibility</b> – Major utilities can average their mercury emissions across their entire system to demonstrate compliance. In addition, ½ of required reductions may be achieved by obtaining emission reduction credits from the trading provisions.	System-wide averaging is maintained. Emission reduction credits are not available to meet rule requirements. Major utilities can enter into agreements with each other to share reductions to meet rule requirements.  Utilities would be required to comply annually with the reduction requirements. However, they will have opportunity to true-up over two years if a timely commitment is made.  A multi-pollutant option is included that would allow relief from the initial reduction requirement of 40% to accommodate those major utilities that desire additional time for comprehensive planning if they choose this approach.
<b>Periodic Evaluation</b> – Proposed rules include a review every 18 months.	Evaluation report provided at 6 years (2009) and 10 years (2013). In addition, a NRB report would occur upon the promulgation of a federal regulation or enactment of a federal law that addresses utility mercury emissions in the state.